An Daras Multi Academy Trust

St Stephens Community Academy

Curriculum Scheme of Learning - Computing and E Safety

Integrated Curriculum Scheme of Learning - 2015	
Domain of Learning:	**Computing**
National Curriculum Subjects:	**Computing**
Domain Leader:	**R. Hudson**
Agreed and Approved:	**Sept 15**
Next Leader Review:	**Sept 16**
Related Documents and Guidance:	National Curriculum 14 Dimensions Skill Ladders 14 SSCA Non-Negotiable 14 SSCA E Safety and Computing Policy 15 SSCA Computing Curriculum Statement 15 SSCA Child Protection and Safeguarding Policy 15

St Stephens Community Academy **Computing and E-safety** *Scheme of Learning – 2015*	
Curriculum Statement	At St Stephens Community Academy we believe that computing is an essential part of the national curriculum. Computing is an integral part of modern day life and therefore provides a wealth of learning opportunities, explicitly within computing and also across other curriculum subjects. Through the study of computing, children are able to develop a wide range of fundamental skills, knowledge and understanding that they will need for the rest of their lives. Computers have become a part of everyday life. For most of us, technology is essential to our daily lives, at home and at work. 'Computational thinking' is a skill children must be taught in order to provide them with essential knowledge and skills that will enable them to participate effectively in the digital world. The new national curriculum defines three clear aspects of the computing curriculum: 1. Computer Science (CS), 2. Information Technology (IT) 3. Digital Literacy (DL). **The aims of teaching Computing, as outlined in the National Curriculum are to ensure that all pupils:** • can understand and apply the fundamental principles and concepts of computer science, including abstraction, logic, algorithms and data representation • can analyse problems in computational terms, and have repeated practical experience of writing computer programs in order to solve such problems • can evaluate and apply information technology, including new or unfamiliar technologies, analytically to solve problems • are responsible, competent, confident and creative users of information and communication technology In **Key Stage 1** the children will be taught to: • understand what ***algorithms*** are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions. • to create and ***debug*** simple programs and use logical reasoning to predict the behaviour of simple programs. • use a range of technology purposefully • create, organise, store, manipulate and retrieve digital content • recognise common uses of information technology beyond school. • use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. In **Key Stage 2** the children will:

	• design, write and ***debug*** programs that accomplish specific goals, including controlling or simulating physical systems; • solve problems by decomposing them into smaller parts. • use sequence, selection, and repetition in programs, use logical reasoning to explain how some simple ***algorithms*** work and correct errors in algorithms and programs. • be taught to understand computer networks, including the internet, and the opportunities they offer for communication and collaboration. • use search technologies effectively, learn to appreciate how results are selected and ranked, and be discerning in evaluating digital content. • be taught to select, use and combine a variety of software (including internet services) on a range of digital devices to create a range of programs, systems and content that accomplish given goals. • use technology safely, respectfully and responsibly; recognise acceptable /unacceptable behaviour; identify a range of ways to report concerns about content and contact.

St Stephens Community Academy

Computing and E-safety *Scheme of Learning – 2015*

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
1 – Unit Title	**We are Treasure Hunters** – Using programmable toys	**We are TV Chefs** – Filming the steps of a recipe	**We are Painters** – Illustrating an eBook	**We are Collectors** – Finding images using the web	**We are Storytellers** – Producing a talking book	**We are Celebrating** – Creating a card digitally
A. Nat Curriculum 14	Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs Recognise common uses of information technology beyond school	Digital Literacy Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use logical reasoning to predict the behaviour of simple programs	Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Digital Literacy Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Use technology purposefully to create, organise, store, manipulate and retrieve digital content Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies. Recognise common uses of information technology beyond school	Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Information Technology Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of information technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.

B. Academy Aims Link • SSCA • ADMAT	Accelerating and sustaining children's progress towards higher achievement. Creating an enjoyable and creative curriculum that meets the learning needs of children. Ensuring achievement gaps for disadvantaged children are addressed. Skilled – to have learning skills for the modern world.	Ensuring achievement gaps for disadvantaged children are addressed. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind.	Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind.	Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind	Creating an enjoyable and creative curriculum that meets the learning needs of children. Accelerating and sustaining children's progress towards higher achievement. Providing for children a safe, stimulating, caring but challenging learning environment. Skilled – to have learning skills for the modern world. Safe and Strong – to have a healthy body and mind.	Creating an enjoyable and creative curriculum that meets the learning needs of children. Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Skilled – to have learning skills for the modern world.
C. Scheme Reference Rising Stars ' Switched on Computing'	**Programming**	**Computational Thinking**	**Creativity**	**Computer Network**	**Communication and Collaboration**	**Productivity**
D. Key Knowledge	Understand algorithms Create simple programs	Use technology purposefully to create digital content Recognise common uses of technology beyond school	Use technology purposefully to create digital content	Use technology safely and respectfully Recognise common uses of technology beyond school	Use technology purposefully to organise and store digital content	Use technology purposefully to organise and store digital content
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can use a range of programmable toys, Beebot, cars etc I can create a simple program. I can describe an algorithm in simple terms. I can programme a simple programmable toy, e.g. Move the Beebot backwards and forwards.	I can use ICT to generate, amend and record my work. I can use simple interactive computer programs.	I can talk about how to keep my self safe when using technology I can use a paint package to create a picture on screen.	I can talk about what happens when I use ICT. I can talk about how ICT is used. I can talk about how to keep my self safe when using technology.	I can enter and retreive work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a wordbank to create a sentence	I can enter and retrieve work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a word bank to create a sentence
F. Suggested programmes/hardware	Hardware: Bee Bots and other programmable toys. Software:	Hardware: iPads Software: Paint Movie maker	Hardware: PCs/ iPads Software: Paint Word	Software : Internet PowerPoint	Software : PowerPoint	Software : PowerPoint

	Apps: Begot App for iPad	Apps: I-Movie	PowerPoint Apps: Software			
G. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy: writing/storytelling Maths	Literacy Maths
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship		Hectors World: CEOP	E Safety: Safer Internet Day http://www.saferinternetday.org/web/	E Safety: link to browsing the internet *Going Places Safely* *ABC Searching*	Going Places Safely Digi duck e-book	
I. Assessment Pathway	I can use a range of programmable toys, Beebot, cars etc. I can create a simple program. I can describe an algorithm in simple terms. I can programme a simple programmable toy, e.g. Move the Beebot backwards and forwards. (Level 1)	I can use ICT to generate, amend and record my work. I can use simple interactive computer programs. (Level 1/2)	I can talk about how to keep myself safe when using technology. I can use a paint package to create a picture on screen. (Level 1)	I can talk about what happens when I use ICT. I can talk about how ICT is used. I can talk about how to keep myself safe when using technology (Level 1)	I can enter and retrieve work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a word bank to create a sentence (Level 2)	I can enter and retrieve work. I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a word bank to create a sentence (Level 2)

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
2 – Unit Title	**We are Astronauts –** Programming on screen	**We are Game Testers –** Exploring how computer games work	**We are Photographers** – Taking better photos	**We are Researchers –** Researching a topic	**We are Detectives –** Collecting clues	**We are Zoologists –** Collecting data about bugs
A. Nat Curriculum 14	Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Create and debug simple programs Use logical reasoning to predict the behaviour of simple programs.	Computer Science Understand what algorithms are; how they are implemented as programs on digital devices; and that programs execute by following precise and unambiguous instructions Use logical reasoning to predict the behaviour of simple programs. Recognise common uses of technology beyond school Use technology safely and respectfully, keep personal information private, know where to go for help and support if they have concerns about contact/content on the internet or other online technologies	Digital Literacy Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Information Technology Digital Literacy Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Information Technology Digital Literacy Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.	Digital Literacy Use technology purposefully to create, organise, store, manipulate and retrieve digital content Recognise common uses of technology beyond school Use technology safely and respectfully, keeping personal information private; identify where to go for help and support when they have concerns about content or contact on the internet or other online technologies.
B. Academy Aims Link • SSCA • ADMAT	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Creating an enjoyable and creative curriculum that meets the learning needs of children. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs	Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence.	Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs

	Safe and Strong – to have a healthy body and mind.	of children. Skilled – to have learning skills for the modern world.	of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms	Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms	of children. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms
C. Scheme Reference Rising Stars ' Switched on Computing'	**Programming**	**Computational Thinking**	**Creativity**	**Computer Network**	**Communication and Collaboration**	**Productivity**
D. Key Knowledge	Understand what algorithms are, how they are implemented on digital devices. Programs execute by following precise and unambiguous instructions. Create and debug simple programs	Create and debug simple programs Programs execute by following precise and unambiguous instructions. Use logical reasoning to predict the behaviour of simple programs.	Use technology purposefully to create digital content Recognise common uses of technology beyond school Use technology safely and respectfully	Use technology safely and respectfully know where to go for help and support if they have concerns about contact/content on the internet or other online technologies	Use technology safely and respectfully, keep personal information private, know where to go for help and support if they have concerns about contact/content on the internet or other online technologies	Recognise common uses of technology beyond school Use technology purposefully Recognise common uses of technology beyond school
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can describe an algorithm in increasing detail. I can debug a simple program. I can predict the the behaviour of a simple program (Level 2)	I can debug a simple program. I can plan and give instructions to devices. I can use an increasing range of computer programs (Level 2)	I can talk about how to keep myself safe when using technology. I can use ICT to organise and present information. I can talk about the use of ICT in and out of school. I can talk about the steps to take if I am concerned or need help	I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. (Level 3)	I can send, receive and reply to e-mails. I can select and use a range of software to collect and present data and information (Level 3)	I can select and use a range of software to collect and present data and information. I can use ICT to find information. I can enter data into a simple database (Level 3)
F. Suggested programmes/hardware	Lightbot APP Scratch Kodu	Scratch Screencast-o-matic	Picasa Web Pixlr.com	Internet PowerPoint	Email Excel	Excel Photo Gallery Google Maps Google earth

G. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship	E Safety What is real? (this will be followed up in the email unit)	E Safety Lee and Kim: CEOP: Learning that Avatars are controlled by real people. Guy Fawkes Shares personal information over the internet and gets into trouble	E Safety: Safer Internet Day http://www.saferinternetday.org/web/	E Safety Link to browsing on the internet Hectors World (CEOP) Using Key words Finding and Identifying Appropriate online content Subject category searching	E Safety Sending email My online Neighbourhood Netssmart E-Book about Webster Sharing Personal information	E Safety Going Places Safely Smartie the Penguin
I. Assessment Pathway	I can describe an algorithm in increasing detail. I can debug a simple program. I can predict the behaviour of a simple program (Level2)	I can debug a simple program. I can plan and give instructions to devices. I can use an increasing range of computer programs (Level2)	I can talk about how to keep myself safe when using technology. I can use ICT to organise and present information. I can talk about the use of ICT in and out of school. (Level2) I can talk about the steps to take if I am concerned or need help. (Level 3)	I can use ICT to generate, amend and record my work. I can enter words into a word processor. I can use the backspace and delete keys. I can use a wordbank to create a sentence. (Level 2) I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. (Level 3)	I can use ICT to organise and present information. I can talk about the use of ICT in and out of school. I can talk about the steps to take if I am concerned or need help. (Level 2) I can select and use a range of software to collect and present data and information, (level 3)	I can select and use a range of software to collect and present data and information. I can use ICT to find information. (Level 2) I can enter data into a simple database. (Level 3)

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
3 – Unit Title	**We are Programmers –** Programming an animation	**We are Bug Fixers –** Finding and correcting bugs in programs	**We are Presenters –** Videoing performance	**We are Network Engineers –** Exploring computer networks including the internet	**We are Communicators –** Communicating safely on the internet	**We are Opinion Pollsters –** collecting and analysing data
A. Nat Curriculum 14	**Computer Science** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence in programs; work with variables and various forms of input and output Use logical reasoning to detect and correct errors in algorithms and programs Select, use and combine a variety of software to design and create content that accomplish(es) given goals, including presenting information	**Computer Science** Debug programs that accomplish specific goals Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	**Digital Literacy** Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Work with variables and various forms of input and output Use technology safely, respectfully and responsibly	**Information technology** Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Digital Literacy** Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Information technology** Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration
B. Academy Aims Link • SSCA • ADMAT	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next

	of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.
C. Scheme Reference Rising Stars ' Switched on Computing'	**Programming**	**Computational Thinking**	**Creativity**	**Computer Network**	**Communication and Collaboration**	**Productivity**
D. Key Knowledge	Use sequence, selection and repetition in programs	Design, write and debug programs	Select, use and combine a variety of software (including internet services) on a range of digital devices	Use search technologies effectively	Understand computer networks including the internet Use technology safely, respectfully and responsibly	Select, use and combine a variety of software to design and create a range of programs, systems and content
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can describe an algorithm in increasing detail. I can debug a simple program.	I can talk about how to keep my-self safe when using technology (Level 2)	I can talk about the use of ICT in and out of school. (Level 2)	I can use search technology effectively and safely.	I can talk about the steps to take if I am concerned or need help. (Level 2)	I can enter data into a simple database. I can use a spreadsheet to produce a table of

	I can predict the behaviour of a simple program. (Level 2) I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3)	I can debug a simple program. (Level 2) I can design, write and debug a program linked to specific goals (Level 3)	I can talk about and give reasons for the use of ICT in the wider world (Level 3) I can talk about the steps to take if I am concerned or need help. (Level 2)		I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. (Level 3)	data. (Level 3)
F. Suggested programmes/hardware	Software: Scratch PowerPoint Apps: Hopscotch	Software: Scratch PowerPoint Apps:	Software: Movie Maker Apps: I-Movie	Software: Access to school network and command prompt	Software: Email Video Conf Presentation software Apps: FaceTime?	Software: Excel Word Apps: Safari
G. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths- data handling
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship	E Safety Keep it private	E Safety Anti-bullying week: Cyberbullying: Screen out the Mean Kidscape advise Beatbullying resources	E Safety: Safer Internet Day Keep it Private: ROAR poster: Online life FLAT STANLEY: sharing photos and videos E Safety http://www.saferinternetday.org/web/	E Safety My online community	E Safety: Communicating safely on the internet Finding and Identifying Appropriate online content Subject category searching Writing good emails Sharing Personal Information Show on line respect Cyber cafe	E Safety
I. Assessment Pathway	I can describe an algorithm in increasing detail. I can debug a simple program. I can predict the behaviour of a simple program. (Level 2) I can describe how an algorithm works.	I can talk about how to keep my-self safe when using technology (Level 2) I can debug a simple program. (Level 2) I can design, write and	I can talk about how to keep my-self safe when using technology (Level 2) I can talk about the use of ICT in and out of school. (Level 2) I can use ICT to share and	I can use search technology effectively and safely. I can describe ways of ensuring safe use of technology. (Level 3)	I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. (Level 3)	I can enter data into a simple database. I can use a spreadsheet to produce a table of data. (Level 3)

	I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3)	debug a program linked to specific goals (Level 3)	exchange ideas. I can talk about and give reasons for the use of ICT in the wider world (Level 3)			

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
4 – Unit Title	**We are Software Developers –** Developing a simple educational game	**We are Toy Designers –** Prototyping and interactive toy	**We are Musicians –** Producing digital music	**We are HTML Editors –** Editing and writing HTML	**We are Co-authors –** Producing a wiki	**We are Meteorologists –** Presenting the weather
A. Nat Curriculum 14	**Computer Science** Design, write and debug programs that accomplish specific goals Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	**Computer Science** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	**Information technology** Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour	**Digital Literacy** Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Digital Literacy** Solve problems by decomposing them into smaller parts Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use search technologies effectively Use a variety of software (including internet services) on a range of digital devices to create content including presenting information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Information technology** Work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information
B. Academy Aims Link • SSCA	Accelerating and sustaining children's	Accelerating and sustaining children's	Accelerating and sustaining children's progress towards	Accelerating and sustaining children's progress towards	Accelerating and sustaining children's progress towards	Accelerating and sustaining children's

• ADMAT	progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.
C. Scheme Reference Rising Stars ' Switched on Computing'	**Programming**	**Computational Thinking**	**Creativity**	**Computer Network**	**Communication and Collaboration**	**Productivity**
D. Key Knowledge	Work with variables and various forms of input and output	Use sequence, selection and repetition in programs	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and	Understand computer networks including the internet; how they can provide multiple services, such as the	Use a variety of software (including internet services) to create content including presenting information	Use search technologies effectively, appreciate how results are

			create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	world-wide web; and the opportunities they offer for communication and collaboration		selected and ranked, and be discerning in evaluating digital content
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3) I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3)	I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. I can select and use a range of software to collect and present data and information, e.g. Word, Publisher. (Level 3)	I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. I can use search technology effectively and safely. (Level 3)	I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. I can select and use a range of software to collect and present data and information, e.g. Word, Publisher. (Level 3)	I can use a graphics package to create a picture. I can combine graphics with text. I can program a sequence of instructions to control a device. I can use ICT to gather physical data. I can enter data into a simple database. I can use a spreadsheet to produce a table of data. (Level 3)
F. Suggested programmes/hardware	Software: Scratch Snap! Apps: a.l.e.x	Software: Scratch Apps:	Software: Audacity Apps: Garage band	Software: FireFox Brackets Apps: Safari	Software: Learning Platform Apps: Safari Wikpedia	Software: Excel PowerPoints Apps:
G. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
H. E-Safety	E Safety	E Safety	E Safety: Safer Internet Day	E Safety	E Safety: My Online	E Safety

Taken from SWGfl Digital Literacy and Citizenship		Anti-bullying week: Cyberbullying Screen out the Mean Cyberbullying Kidscape advise Beat bullying resources Positive online communications Keep It Private: ROAR Educate Poster: online identity and strong passwords	http://www.saferinternetday.org/web/	Using Keywords: Finding and Identifying Appropriate Content ROAR Educate: Searching on line.	Community ROAR poster: Online life FLAT STANLEY: sharing photos and videos Follow the Digital Trail ROAR Educate poster: privacy and posting Show on line respect Cyber cafe	Things for Sale: Media Smart Digital Adwise (Literacy link to adverts)
I. Assessment Pathway	I can describe how an algorithm works. I can design, write and debug a program linked to specific goals. I can work with programs that involve sequence, selection, and repetition. I can describe ways of ensuring safe use of technology (Level 3)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use ICT to save information. I can use a search engine to locate information. I can use ICT to find information, e.g search a CD ROM using key words or a menu, using a search engine. I can select and use a range of software to collect and present data and information, e.g. Word, Publisher. (Level 3)	I can use ICT to share and exchange ideas. I can talk about and give reasons for the use of ICT in the wider world. I can send, receive and reply to e-mails. I can use search technology effectively and safely. (Level 3)	I can use 'and' and 'or' when searching the Internet. I can use ICT to interpret findings and answer questions, e.g. Data Loggers. I can use ICT to save information. I can select, use and combine a range of software to collect, evaluate and present data and information, e.g. Word, Publisher Excel. (Level 4)	I can use a graphics package to create a picture. I can combine graphics with text. I can program a sequence of instructions to control a device. I can use ICT to gather physical data. I can enter data into a simple database. I can use a spreadsheet to produce a table of data. (Level 3)

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
5 – Unit Title	**We are Game Developers** – Developing an interactive game	**We are Cryptographers** – Cracking codes	**We are Artists** – Fusing geometry and art	**We are Web Designers** – Creating a website about cyber safety	**We are Bloggers** - Sharing experiences and opinions	**We are Architects** – Creating a virtual space
A. Nat Curriculum 14	**Computer Science** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms/ programs Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	**Computer Science** Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Information technology** **Computer Science** Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	**Digital Literacy** Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Digital Literacy** Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Be discerning in evaluating digital content	**Digital Literacy** Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information

B. Academy Aims Link • SSCA • ADMAT	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Providing for children a safe, stimulating, caring but challenging learning environment. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world. Soaring Stars – to have a love of life in all its forms.
C. Scheme Reference Rising Stars ' Switched on Computing'	**Programming**	**Computational Thinking**	**Creativity**	**Computer Networks**	**Communication and Collaboration**	**Productivity**
D. Key Knowledge	Design, write and	Use logical reasoning to	Use sequence, selection, and	Understand computer	Understand computer	Use search technologies

	debug programs that accomplish specific goals	explain how some simple algorithms work	repetition in programs	networks including the internet Select, use and combine a variety of software to design and create a range of programs	networks including the internet Select, use and combine a variety of software to design and create a range of content that accomplishes given goals	effectively Select, use and combine a variety of software (including internet services) to design and create a range of programs, systems and content that accomplish given goals
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use ICT to save information. I can use 'and' and 'or' when searching the Internet. I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can use ICT to interpret findings and answer questions, e.g. Data Loggers. I can use a graphics package to develop and refine an image. I can use a multimedia package to produce a set of linked pages that include images, sound and text. I can choose an appropriate sensor to monitor environmental conditions and changes. I can gather and enter data into a data-handling package. I can use a spreadsheet to carry out calculations. I can select, use and combine a range of software to collect, evaluate and present data and information, e.g. Word, Publisher Excel. (Level 4)
F. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
G. Suggested programmes/hardware	Software: Scratch Kodu Coda Bal APP	Software: Scratch	Software: Scratch	Software: Google	Software: Blogger Learning Platform	Software: Screencast-o-mat
H. E-Safety	E Safety	E Safety	E Safety: Safer Internet Day	E Safety	E Safety:	E Safety :Privacy Rules

Taken from SWGfl Digital Literacy and Citizenship		Anti-bullying week: Cyberbullying Rings of responsibility: Videos: pause before you post Power of words: Cyberbullying Online symbols Let's fight it together: cyberbullying film	http://www.saferinternetday.org/web/ Think you know Jigsaw: Becky's Story	Powerful Passwords Password Rap Horrible Histories How secure if my password? Cyber safety: Cyberbullying Choosing a good search site: BBC Website on searching Right sites: Don't be fooled	Positive online communications Safe on line talk Sharing Personal Information CEOP: Cyber café: chat activity	Cybernetrix
I. Assessment Pathway	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use logical reasoning to explain how algorithms work. I can design, write and debug a program that includes controlling or simulating physical systems. I can work with programs that involve variables. I can describe ways of reporting concerns and inappropriate behaviour. (Level 4)	I can use ICT to save information. I can use 'and' and 'or' when searching the Internet. I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can exchange information with others in a range of different ways, e.g. e-mail, blog, Skype I can send text and images as attachments. I can describe the way in which search results are selected and ranked. (Level 4)	I can use ICT to interpret findings and answer questions, e.g. Data Loggers. I can use a graphics package to develop and refine an image. I can use a multimedia package to produce a set of linked pages that include images, sound and text. I can choose an appropriate sensor to monitor environmental conditions and changes. I can gather and enter data into a data-handling package. I can use a spreadsheet to carry out calculations. I can select, use and combine a range of software to collect, evaluate and present data and information, e.g. Word, Publisher Excel. (Level 4)

Year Group	Aut 1	Aut 2	Spr 1	Spr 2	Sum 1	Sum 2
6 – Unit Title	**We are App Planners** – Planning the creation of a mobile app	**We are Project Managers** – Develop project management skills	**We are Market Researchers** – Researching the app market	**We are Interface Designers** – Designing an interface for an app	**We are App Developers** – Developing a simple mobile phone app	**We are Marketers** – Creating video and web copy for a mobile phone app
A. Nat Curriculum 14	**Computer Science** Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Use search technologies effectively, appreciate how results are selected and ranked, and be discerning in evaluating digital content Work with variables and various forms of input and output	**Computer Science** Solve problems by decomposing them into smaller parts Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact. Be discerning in evaluating digital content Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs	**Digital Literacy** Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.	**Computer Science** **Information technology** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Be discerning in evaluating digital content Recognise acceptable/unacceptable behaviour	**Computer Science** Design, write and debug programs that accomplish specific goals, including controlling or simulating physical systems; solve problems by decomposing them into smaller parts Use sequence, selection, and repetition in programs; work with variables and various forms of input and output Use logical reasoning to explain how some simple algorithms work and to detect and correct errors in algorithms and programs Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information	**Digital Literacy** **Information technology** Understand computer networks including the internet; how they can provide multiple services, such as the world wide web; and the opportunities they offer for communication and collaboration Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and information Use technology safely, respectfully and responsibly; recognise acceptable/unacceptable behaviour; identify a range of ways to report concerns about content and contact.

B. Academy Aims • SSCA • ADMAT	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self -confident – to have high self -esteem and self - confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.	Accelerating and sustaining children's progress towards higher achievement. Ensuring achievement gaps for disadvantaged children are addressed. Ensuring children are equipped for the next phase of learning. Creating an enjoyable and creative curriculum that meets the learning needs of children. Safe and Strong – to have a healthy body and mind. Self-confident – to have high self-esteem and self-confidence. Socially aware – to be global citizens with good social skills. Skilled – to have learning skills for the modern world.
C. Scheme Reference Rising Stars ' Switched on Computing'	**Computer Networks**	**Computational Thinking**	**Communication and Collaboration**	**Productivity**	**Programming**	**Creativity**
D. Key Knowledge	Understand computer networks including the internet Use search technologies effectively	Select, use and combine a variety of software (including internet services) on a range of digital devices to design and create a range of programs, systems and content that accomplish given goals, including collecting, analysing, evaluating and presenting data and	Select, use and combine a variety of software to design and create a range of programs, systems and content that accomplish given goals Use technology safely, respectfully and responsibly	Design, write and debug programs that accomplish specific goals Use sequence, selection, and repetition in programs	Design, write and debug programs that accomplish specific goals Use sequence, selection, and repetition in programs Use logical reasoning to explain how some simple	Understand computer networks including the internet Select, use and combine a variety of software Use technology safely, respectfully and responsibly

		information Use technology safely, respectfully and responsibly			algorithms work	
E. Key Skills and Understanding Ref: The Saints Way: Church of England MAT	I can use a multimedia package to refine and present a series of linked pages. I can use 'and', 'or', and quotation marks when searching the Internet. I can use a range of online resources to inform my work. I can talk about the effects of changing variables when using an ICT model. (Level 5)	I can use an objects based graphics package. I can use a multimedia package to refine and present a series of linked pages. I can develop and search a branching database. I can use spreadsheet to test predictions and theories. (Level 5)	I can use 'and', 'or', and quotation marks when searching the Internet. I can choose the most effective method for sharing and communicating information. I can send e-mails to multiple recipients, with attachments where appropriate. I can evaluate my use of ICT and identify improvements that could be made. (Level 5)	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various forms of input and output. I can use a range of systems to report concerns and inappropriate behaviour (Level 5)	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various forms of input and output. I can use a range of systems to report concerns and inappropriate behaviour. (Level 5)	I can select, use and combine a range of software to collect, analyse, evaluate and present data and information, e.g. Word, Publisher, Powerpoint and Excel. I can use a multimedia package to refine and present a series of linked pages. (Level 5)
F. Cross Curricular Links (Core non-negotiable standards)	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths	Literacy Maths
G. Suggested programmes/hardware	Software: Prezi Apps: APP inventor	Apps: Google Apps for education	Software: Movie Maker Apps: I-Movie	Software: PowerPoint	Apps: App Inventor Python APP Scratch Junior	Software: Movie Maker Publisher
H. E-Safety Taken from SWGfl Digital Literacy and Citizenship	E Safety Choosing a Search site: Appropriate online content	E Safety Anti-bullying week: Cyberbullying Rings of responsibility: www.digizen.org: digital values Videos: pause before you post Online symbols	E Safety: Safer Internet Day http://www.saferinternetday.org/web/ You've won a prize (spam) Horrible Histories	E Safety Writing good emails	E Safety Safe on line talk Positive online communications	E Safety Whose is it anyway? (plagiarism) Advertising Detectives: CyberQuoll: trying it on Media Smart: Digital Adwise
I. Assessment Pathway	I can use 'and', 'or', and quotation marks when searching the Internet. I can use a range of online resources to inform my work. I can select, use and combine a range of software to collect,	I can use an objects based graphics package. I can use a multimedia package to refine and present a series of linked pages. I can use sensors to monitor and measure external events. I can talk about the effects of changing variables when using	I can choose the most effective method for sharing and communicating information. I can send e-mails to multiple recipients, with attachments where appropriate. I can use my understanding of ranking to evaluate the digital content of search results.	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various forms of input and output.	I can detect and correct errors in algorithms and programs. I can design, write and debug programs, by deconstructing a problem. I can work with programs that involve various	I can use 'and', 'or', and quotation marks when searching the Internet. I can use a range of online resources to inform my work. I can select, use and combine a range of software to collect,

	analyse, evaluate and present data and information, e.g. Word, Publisher, Powerpoint and Excel.	an ICT model. I can develop and search a branching database. I can use spreadsheet to test predictions and theories.	I can evaluate my use of ICT and identify improvements that could be made.	I can use a range of systems to report concerns and inappropriate behaviour.	forms of input and output. I can use a range of systems to report concerns and inappropriate behaviour.	analyse, evaluate and present data and information, e.g. Word, Publisher, PowerPoint and Excel.